

ABSTRACT OF DISCLOSURE

A semiconductor device includes: a collector region of first
conductive type formed on a semiconductor substrate; a base region of
5 second conductive type formed on the collector region of first conductive
type; a non-doped layer forming region formed in part of a surface region
of the base region of second conductive type; an emitter region of first
conductive type formed in the non-doped layer forming region so that a
bottom of the emitter region reaches the base region of second
10 conductive type; a base leading-out region of second conductive type
formed on the base region of second conductive type; a dielectric formed
on an upper portion and a side portion of the base leading-out region of
second conductive type and the non-doped layer forming region; and an
emitter leading-out region of first conductive type formed on the emitter
15 region of first conductive type.